

Listing of claims:

Claims 1-15 (canceled)

16. (Previously presented) A method for adjusting slope compensation in a switching regulator that includes an inductor, wherein a current flows through the inductor during operation of the switching regulator, the method comprising:

measuring a parameter associated with the inductor, wherein the parameter corresponds to a first slope associated with the current flowing in the inductor;

providing a measurement signal that is associated with the measured parameter such that the measurement signal is indicative of the first slope;

dynamically adjusting a second slope associated with a ramp signal in response to the measurement signal; and

compensating a response associated with a control loop in the switching regulator with the ramp signal such that the control loop is responsive to changes in inductor current slope.

17. (Previously presented) The method of Claim 16 wherein dynamically adjusting the second slope associated with the ramp signal comprises at least one of dynamically changing a capacitance value that is associated with a ramp generator, and dynamically changing a charging current that is associated with the ramp generator circuit, wherein the second slope of the ramp signal is proportional to the ratio of the charging current to the capacitance value such that the second slope of the ramp signal is responsive to the measurement signal.

18. (Previously presented) The method of Claim 16 further comprising: monitoring a reference signal that is related to an output voltage of the switching regulator, dividing the reference signal with the measurement signal to provide a ratio, and changing the second slope associated with the ramp signal in response to the ratio such that the second slope of the ramp signal is responsive to the measurement signal and the output voltage.

19. (Previously presented) An apparatus for adjusting slope compensation in a switching regulator that includes an inductor, wherein a current flows through the inductor during operation of the switching regulator, the apparatus comprising:

a means for measuring a parameter that is associated with the inductor, wherein the parameter corresponds to a first slope associated with the current flowing in the inductor;

a means for providing a measurement signal that is associated with the measured parameter such that the measurement signal is indicative of the first slope;

a means for dynamically adjusting a second slope that is associated with a ramp signal in response to the measurement signal; and

a means for compensating a response that is associated with a control loop in the switching regulator with the ramp signal such that the control loop is responsive to changes in the first slope associated with the current flowing in the inductor via the measurement signal.

20. (Previously presented) The apparatus of claim 19, further comprising: a means for monitoring a reference signal that is related to an output voltage of the switching regulator, a means for dividing the reference signal with the measurement signal to provide a ratio, and a means for changing the second slope that is associated with the ramp signal in response to the ratio such that the second slope of the ramp signal is responsive to the measurement signal and the output voltage.

Claim 21 (canceled)

22. (Previously presented) The method of claim 16, wherein dynamically adjusting the second slope associated with the ramp signal corresponds to dynamically adjusting the second slope associated with the ramp signal in response to the first slope according to at least one of: a matched slope, a fraction of a downward slope associated with the inductor current, and a multiple of the downward slope associated with the inductor current.

23. (Previously presented) The method of Claim 16, further comprising: monitoring an output voltage associated with the switching regulator, and dynamically adjusting the second slope that is associated with the ramp signal in response to the monitored output voltage.

Claim 24 (canceled)

25. (Previously presented) The method of Claim 16, further comprising: monitoring an output voltage associated with the switching regulator to provide a first current signal, generating a second current signal as the measurement signal, summing the first current signal and the second current signal, and adjusting the second slope associated with the ramp signal in response to the sum of the first current signal and the second current signal.

26. (Previously presented) The method of Claim 25, wherein adjusting the second slope associated with the ramp signal corresponds to an integration of the sum of the first current signal and the second current signal with a capacitor circuit.

Claim 27 (canceled)

28. (Previously presented) The apparatus of claim 20, wherein the means for dynamically adjusting the second slope associated with the ramp signal is arranged to adjust the second slope associated with the ramp signal in response to the measured current slope according to at least one of: a matched slope, a fraction of a downward slope associated with the inductor current, and a multiple of the downward slope associated with the inductor current.

29. (Previously presented) The apparatus of Claim 19, further comprising: a means for monitoring an output voltage associated with the switching regulator, and a means for dynamically adjusting the second slope that is associated with the ramp signal in response to the monitored output voltage.

Claim 30 (canceled)

31. (Previously presented) The apparatus of Claim 19, further comprising: a means for monitoring an output voltage associated with the switching regulator to provide a first current signal, a means for generating a second current signal as the measurement signal, a means for summing the first current signal and the second current signal, and a means for adjusting the second slope associated with the ramp signal in response to the sum of the first current signal and the second current signal.

32. (Previously presented) The apparatus of Claim 31, wherein the means for adjusting the second slope associated with the ramp signal is arranged to integrate the sum of the first current signal and the second current signal with a capacitor circuit.